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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,753	08/24/2001	Rudolf Wilhelm Gunnerman	CFT-011	7427

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EXAMINER	
MEDLEY, MARGARET B	
ART UNIT	PAPER NUMBER
1714	

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A-11

Office Action Summary	Application No.	Applicant(s)	
	09/938,753	GUNNERMAN, RUDOLF WILHELM	
	Examiner	Art Unit	
	Margaret B. Medley	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This action is in response to Paper No. 9 dated January 8, 2003 wherein applicant's amendment to the specification at page 3, line 21 to page 4, lines 8; page 7, lines 13-17, page 9, lines 4-23, page 10, lines 9-20 and claims 1-24 and the addition of claims 25-27 has been entered of record.

The amendment filed January 8, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The addition to page 7, lines 13-17 for "and an additive comprising water, a"; the addition to page 9, lines 4-23 for "A preferred polyanhydride is polyalkenyl succinic anhydride"; and the addition to page 10, lines 9-20 for "about 81% to about 99.5%; "; "about 0.5 % to about 19 %"; preferably about 0.5% to about 5%"; "The weight percentage of water to the water-in-oil emulsion fuel is about 0.0% to about 18.5%"; "fuel emulsification additive is about 0.0% to about 25.0%"; "ammonium hydroxide to middle distillate fuel emulsification additive is about 15.0% to about 20.0%"; fatty acid... additive is about 60% to about 70%'; and "polyanhydride to ... additive is about 3.0% to about 10.0%". The examiner did not find the said limitation in the specification and claims as originally filed and applicant did not point out to the examiner the location of said newly added limitations.

Applicant is required to cancel the new matter in the reply to this Office Action.

The disclosure is objected to because of the following informalities: The spelling of "polyalkenyl" should be corrected in line 2 from the end of the paragraph added at page 9, lines 4-23.

Appropriate correction is required.

Claim 8 is objected to because of the following informalities: The second occurrence "additive" in line 3 should be deleted for clarity. Appropriate correction is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added limitation "first amount of water" and "including a second amount of water" in claims 1 and 15; "about 81% to about 99.5%" in claims 2 and 16; "about 0.5% to about 5% in claim 3; "second amount of water is about 0% to about 25% in claims 4 and 17; "first amount of water" in claims 5 and 19; "first amount of water" in claim 6; "ammonia hydroxide is about 15% to about 20% in claims 7 and 20; "fatty acids is about 60% to about 70% in claims 8 and 21"; "polyanhydride is about 3% to about 10%" in claims 9 and 22 are considered as new matter because said limitations were not previously found in the originally specification and claims at the time of the filing of

the instant application. The newly added claims 25-26 that "the first amount of water is about 0% to 18.5% by weight... fuel" and newly added claim 27 that the "additive is about 0.5% to about 5% by weight of ... fuel" is considered as new matter because said limitations were not previous found in the originally specification and claims at the time of the filing of the instant applications.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-17 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenzel et al (Wenzel) 4,083,698 in view of Nixon 3,615,290 and Jahnke 5,920,031 for reasons made of record in Paper No. 7 dated July 3, 2002.

Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenzel et al (Wenzel) 4,083,698 in view of Nixon 3,615,290 and Jahnke 5,920,031 as applied to claims 1-4, 7-17 and 20-27 above, and further in view of Fodor et al (Fodor) 4,173,455, Hazbun et al (Hazbun) 4,770,670 and Latty 4,687,491.

Applicant further claims a method and composition comprising water wherein the particulate impurities have been removed from the water. The primary reference in combination with the secondary reference is silent to said teachings. Fodor, Hazbun and Latty provide teachings to the artisan in the art to use deionized water in the composition of the primary reference.

Fodor teaches an aqueous hydrocarbon emulsion comprising deionized water or water containing up to 300 ppm calcium salts, column 3 lines 49-end.

Hazbun teaches stable micro emulsion compositions comprising distilled water, column 13 for example 38 and deionized water, tables 5-7 of columns 9-10.

Latty teaches hydrocarbon oil and deionized water emulsion wherein the water was prepared by ion exchange purification, column 12, lines 53-55.

It would have been obvious to the artisan in the art to further modify the method and composition of Wenzel with the use of distilled and deionized water to reduce deposits upon combustion due to the impurities present in the water. One would have been motivated to use deionized water to reduce emission pollutants to meet current EPA and Clean Air Standards and to prepare fuel for use in engines that require a minimum amount of pollutants.

Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenzel et al (Wenzel) 4,083,698 in view of Nixon 3,615,290, Jahnke 4,920,031, Foder et al (Foder) 4,173,455, Hazbun et al (Hazbun) 4,770,670 and Latty 4,687,491 as applied to claims 1-5, 7-18 and 20-27 above, and further in view of Lopez 4,770,775 and Osmonics Inc. "Method of Water Purification".

Applicant further claims processes of reverse osmosis for removing impurities from water wherein the primary reference in combination with the secondary references are silent to the said teachings.

Lopez teaches a process for the production of fresh water from sea water by reverse osmosis column 1, lines 6-36 providing the motivation to produce the deionized water of Fodor, Hazbun and Latty by its conventional well-known process rendering the claims prima obvious, especially in view of Latty teachings that deionized water may be produced by more than one process. The "Methods of Water Purification" article by Osmonics Inc. teaches various methods for water purification, pages 1-5, including reverse osmosis, page 5. The article teaches that the process removes virtually all of

organic compounds and 90 to 99% of all ions. This article further provides the teachings to use a reverse osmosis process to purify the water of the primary reference based on the desired purification of water that is desired for its intended use further rendering the instant claims obvious.

Applicant's arguments filed January 8, 2003 have been fully considered but they are not persuasive.

The objection to claims 1-12 is deemed moot in view of applicants' amendments to the said claims.

Applicant argues that the present application does not claim the condensation products of the Wenzel et al invention, and yet still produces a stable fuel emulsion by using emulsifying agents that coat the particles of the dispersed phrase and prevent coagulation of colloidal particles.

Firstly, a review of the instant claims reveals that the feature that emulsifying agents coat the particles of the dispersed phase and prevents coagulation of colloidal particles is not set forth in the claim nor has applicant indicate wherein the instant specification that the said feature may be found.

Secondly, it is noted that the instant clams contain the open-ended language "comprising' and therefore would not exclude the condensation products of Wenzel. The examiner takes the position on record that the originally filed specification and claims of the instant application does not provide for the middle distillate fuel additive having water as part of the additive, but provides for water as being part of the fuel emulsion composition. Thus applicants' arguments that Wenzel fails to provides teachings that water is part of the additive is deemed moot.

Applicant argues that neither Nixon nor Jahnke remedy the deficiency for Wenzel et al with the use of their ammonium alkyl succinic anhydride because a simple mixture

of ammonium hydroxide and alkenyl substituted succinic anhydride does not necessarily produce ammonium alkyl succinic anhydride. Applicant further argues that generally in order to produce ammonium alkyl succinic anhydride, a high pressure and high temperature reaction is required. The examiner disagrees with applicant's arguments in that the production of alkyl succinic anhydride (alkyl SSA) is entirely different from the process for reacting alkyl SSA with ammonium which normally occur insitu at temperatures of 30^0 C especially in light of the teachings of Jahnke, column 16, lines 5-9, 12-15, 19-29 and 41-45.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Wenzel, column 1, line 53- to column 2, lines 1-2; Nixon , column 1, lines 1-20; and Jahnke, column 1, line 9, teach emulsions comprising hydrocarbon fuels, water, surfactant and/or emulsifiers and other conventional additives and therefore are properly combined. Applicants' alleged arguments that Wenzel teaches a micro emulsion, while Nixon and Jahnke teach a macro emulsion is not convincing in that each reference has not explicitly so limited their claimed invention. Further the alkyl succinic anhydride in the presence of ammonium hydroxide would produce ammonium alkyl succinic anhydride in situ that would work as a corrosion inhibitor in the emulsion of each of Wenzel, Nixon and Jahnke because each emulsion comprises water that would cause corrosions problems in the I.C.E. The references are properly combined

since each reference is directed to emulsions and therefore the claims are properly rejected.

The prior art, Paper No. 10, dated January 13, 2003 has been reviewed and considered and has been made of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is 308-2518. The examiner can normally be reached on Monday-Friday from 7:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagannathan Vasu, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is 872-9310 and for after finals 703-872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Margaret B. Medley

MARGARET MEDLEY
PRIMARY EXAMINER

MBMedley:evh

03/31/03